

RUST OF SOUTHERN MILKWEED VINE

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The southern milkweed vine or white vine, *Sarcostemma clausum* (Jacq.) Schult., is becoming a serious pest of citrus in many groves in south Florida. Long and Lakela (2) state that it grows on shell mounds and coastal hammocks in peninsular Florida, the Florida Keys, and tropical America. It was introduced from the Old World. The vine has growing habits somewhat similar to the milkweed vine, *Morrenia odorata* Lindl. Vines from beneath the tree intertwine to reach the lower branches and then rapidly grow through the trees to the tree-top where they eventually envelop the entire top of the tree. Green seedpods about the size of an okra pod are formed and mature in early winter. Seeds have tufts of hair which enable their dispersal by wind.

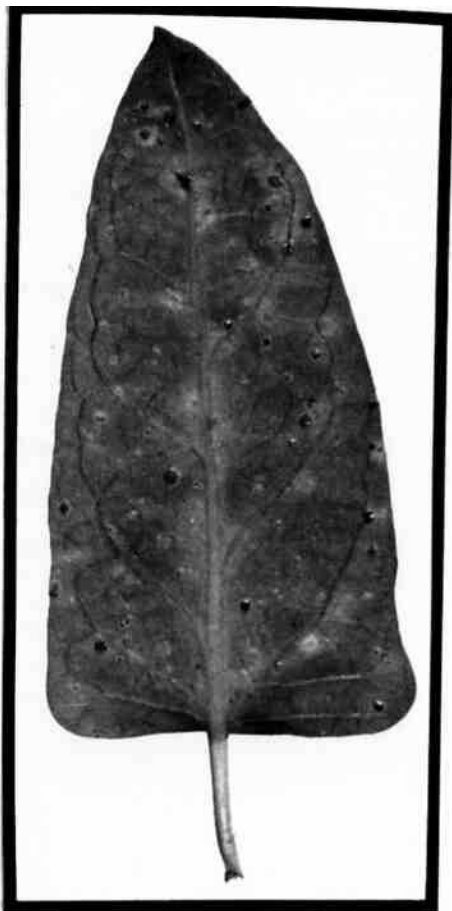


Fig. 1. Scattered orange pustules of *Puccinia obliqua* Berk. & Curt, of underside of leaf of southern milkweed vine, *Sarcostemma clausum*



Fig. 2. Systemic infection by the rust, *Puccinia obliqua* Berk. & Curt, of stems and underside of leaves of southern milkweed vine, *Sarcostemma clausum* (Jacq.) Schult. (Jacq.) Schult.

This vine when growing upright produces leaves; however, unlike the milkweed vine, numerous leafless stems are produced as branches from the main stem and grow along the ground to lengths of 40 feet or more. These stems often root at each node, and new upright leafy sprouts develop from some of the nodes. Not only is there propagation by seed, but the vine spreads from tree to tree by this stem formation.

Control is difficult because of its seed production, rapid spread of seed by wind, regeneration of new vine growth from root pieces following hoeing or cultivation, its habit of producing long leafless stems that are intertwined along the ground, and its high tolerance to most herbicides tested.

In 1973, a rust was observed attacking the leaves, stems, and seedpods in a large grove in Loxahatchee, Florida. This rust has been found on vines at Immokalee and Indiantown, Florida. The rust was identified by Dr. Joe F. Hennen, Purdue University, Lafayette, Indiana, as *Puccinia obliqua* Berk. & Curt. Arthur (1) lists several plants, all in the family Asclepiadaceae, as hosts of this fungus. This rust may have potential as a biological control agent. Two types of pustules are produced:

1. Scattered orange pustules on leaves, stems, and seedpods (fig. 1).
2. Systemic infection, the most destructive form of this rust on *Sarcostemma clausum*. Chocolate-brown pustules literally covering leaves and stems of affected parts (fig. 2). This often results in "witches broom" and subsequent dieback.

The systemic infection, while it will not kill the vine, has a debilitating effect so that it becomes unthrifty and fails to flower.

#### Literature Cited

1. Arthur, J. C. 1934. Manual of the rusts in United States and Canada. Purdue Research Foundation, Lafayette, Indiana. 438 p.
2. Long, R. W., and O. Lakela. 1976. A flora of tropical Florida. Banyan Books, Miami, Florida. 962 p.